

**DECISION
AND
FINDING OF NO SIGNIFICANT IMPACT**

**Shooting white-tailed deer
to assist the City of Philadelphia, Fairmont Park Commission
in achieving deer population reductions
on park properties located in the Pennsylvania counties of
Delaware, Montgomery and Philadelphia**

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS), Wildlife Services (WS) program responds to requests for assistance from individuals, organizations and agencies experiencing damage caused by wildlife in Pennsylvania. WS has prepared an environmental assessment (EA) that analyzes alternatives for managing white-tailed deer damage associated with elevated deer densities on park properties administered by the City of Philadelphia, Fairmont Park Commission (Commission) in the Pennsylvania counties of Delaware, Montgomery and Philadelphia. Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions may be categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). An EA was prepared in this case to facilitate planning, interagency coordination, and the streamlining of program management, and to clearly communicate with the public the analysis of cumulative impacts. The pre-decisional EA released by WS in December 2000 documented the need for white-tailed deer damage management in the proposed project area and assessed potential impacts of various alternatives for responding to white-tailed deer damage problems. The EA is tiered to the programmatic Environmental Impact Statement (EIS) for the Wildlife Services Program¹ (USDA 1994).

WS's proposed action was to assist the City of Philadelphia, Fairmont Park Commission in maintaining a healthy sustainable ecosystem on park properties administered by the Commission in Delaware, Montgomery and Philadelphia Counties in the state of Pennsylvania by assisting the Commission in implementing their Deer Management Program. Specifically, WS would participate in one aspect of the Commission's Deer Management Program to reduce deer densities by shooting deer. Based on the analysis in the EA, I have determined that there will not be a significant impact, individually or cumulatively, on the quality of the human environment from implementing the proposed action, and that the action does not constitute a major federal action significantly affecting the quality of the human environment.

¹ USDA (U.S. Department of Agriculture), Animal and Plant Health Inspection Service (APHIS), Animal Damage Control (ADC). 1994. Animal Damage Control Program, Final Environmental Impact Statement. Anim. Plant Health Inspection Serv., Anim. Damage Control. Hyattsville, MD. Volume 1, 2 & 3.

Public Involvement

The pre-decisional EA was prepared and released to the public for a 32-day comment period by a legal notice in the Philadelphia Daily News on December 6, 2000. The pre-decisional EA was also mailed directly to agencies, organizations, and individuals with probable interest in the proposed program. One comment was received by WS within the comment period. The commentor provided comments on the issue of compensatory reproduction. This issue is discussed in section 4.1.1 of the pre-decisional EA.

Affected Environment

The Commission manages 8900 acres, including 65 parks, in Delaware, Montgomery and Philadelphia Counties of Pennsylvania and maintains a mission to preserve its open spaces, streams, woodlands, landscapes and structures, and to provide recreational opportunities for the citizens and visitors of Philadelphia. The two largest portions of the park, the Wissahickon Valley (1841 acres) and the Pennypack Park (1618 acres) are nearly entirely forested. Many of the woodland stands are dominated by large mature trees with forest types including oak/beechn, mixed oak, hemlock/hardwood, tulip tree/hardwood and flood plain forests dominated by box elder, sycamore and silver maple (Natural Resource Consultants, Inc. 1996). The parks have an extensive trail system. Trail users include hikers, joggers, bikers, horseback riders, bird watchers, and other outdoor enthusiasts.

Objectives

The objective of the proposed action is to assist the Fairmount Park Commission in reducing the number of deer residing in or frequenting the park properties located in Delaware, Montgomery and Philadelphia counties. The Commission has established an over-winter population density goal of 8-10 deer per square mile. The estimated initial number of deer that would be removed is 300. The deer population within the park would be reevaluated annually prior to removal activities to determine if the remaining deer are within the population goals and objectives of the Commission. Additional deer may be removed after reevaluation to bring the population into the desired population densities. Deer would not be removed to a number below the overwinter deer population density goal of 8-10 deer per square mile.

Major Issues

Several major issues were contained in scope of this EA. These issues were consolidated into the following 5 primary issues to be considered in detail:

1. Effects on target deer population
2. Effects on nontarget species populations, including T&E species

3. Effects human health and safety
4. Effects on aesthetics
5. Humanness and Animal Welfare Concerns

Alternatives Analyzed in Detail

Two potential alternatives were developed to address the issues identified above. Four additional alternatives were considered but not analyzed in detail. A detailed discussion of the anticipated effects of the alternatives on the objectives and issues are contained in the EA. The following summary provides a brief description of each alternative and its anticipated impacts.

Alternative 1. No Action/ Current Program. Under the No Action/Current Program Alternative, there would be no WS involvement in the Commission's ongoing deer management program to reduce deer damage within the park system and adjacent properties. However, the Commission would contract with a public or private entity to conduct the work that would no longer be available from WS. If these entities are able to reduce deer densities to meet the Commission's white-tailed deer population goal objectives the results would be similar to those described below in Alternative 2. If these entities did not meet the Commission's population goal objectives it is likely the negative impacts that deer are having on the park system and surrounding areas would possibly remain the same or continue to increase above current levels.

Alternative 2. Proposed Action/ WS Shoots Deer to Supplement the Division's Program. The proposed action is for WS to assist the Fairmount Park Commission in reaching their white-tailed deer population goal objective by participating in one aspect of the Commission's Deer Management Program. That is to reduce deer densities on properties administered by the Commission in Delaware, Montgomery and Philadelphia Counties in the state of Pennsylvania. The Commission has determined that deer population reductions are necessary to reduce the negative impacts that white-tailed deer are having on the park system and surrounding properties. Alternative 2 benefits the resource owners/managers, maintains a healthy sustainable ecosystem and provides benefits to public health and safety, while resulting in very low risk of adverse impact on native wildlife populations or T&E species, and very low risks of adverse impacts to public health or safety. Proposed methods are highly selective for target species and appear to present a balanced approach to the issues of humanness and aesthetics when all facets of these issues are considered.

Alternatives considered but not analyzed in detail were:

WS Provision of Technical Assistance and/or Nonlethal Operational Assistance.

This alternative would require that WS implement only nonlethal strategies or methods, or require the Commission to implement them without conducting any lethal removal of deer. This alternative was not considered in detail because the Commission has not requested

this assistance from WS. The Commission has specifically requested that WS provide supplemental assistance by shooting deer on park properties pursuant to permit, since WS has the expertise, training, and legal authority to assist in conducting deer damage control activities. The Commission has not requested that WS conduct deer damage activities other than shooting. Furthermore, WS has no authority to require that the Commission implement any specific methods or groups of methods.

Deer Population Reduction Through Reproductive Control. Although reproductive control technologies have been researched since at least the 1970's, to date, there is no method, technique, or material available for use on free-ranging white tailed deer that has proven to reduce the population to desired levels. Research on wildlife sterilization and contraception tools has so far concentrated on development of materials and delivery systems, not on the effectiveness of materials in achieving population reduction in the wild. Clinical and pen trials (with confined herds) are and will be conducted for the use of PZP and gene therapy to control reproduction in white-tailed deer. Research opportunities for the future involve developing materials and techniques that 1. Enable treatment of a sufficient number of females to affect population reduction, 2. Do not pose threats to human health via food chain contamination, and 3. Satisfy logistical, economic, and sociocultural concerns regarding the handling, marking, and treating of target individual deer and populations. Population modeling indicates that reproductive control is more efficient than lethal control only for some rodent and small bird species with high reproductive rates and low survival rates. Because there is no tool currently available, and other constraints, this alternative is not given further consideration.

Trap and Relocate Deer. This alternative would involve capturing deer alive using cage-type traps followed by relocation of the captured deer to another area. Population reduction achieved through capture and relocation is labor intensive, and would be costly (\$273-\$2,876/deer) (O'Bryan and McCullough 1985, Bryant and Ishmael 1991). Physiological trauma and deer mortality during capture and transportation would be high and deer mortality after translocation has ranged from 25-89% (Jones and Witham 1990, Mayer et al. 1993). The American Veterinary Medical Association, The National Association of State Public Health Veterinarians, and the Council of State and Territorial Epidemiologists opposes relocation of mammals because of the risk of disease transmission (USDA 1994). High mortality rates of relocated deer, combined with the manner in which many of these animals die, make it difficult to justify relocation as a humane alternative to removal methods (O'Bryan and McCullough 1985, Jones and Witham 1990, Bryant and Ishmael 1991, Ishmael et al. 1995, and Cromwell et al. 1999).

Deer Removal by Licensed Hunters. This alternative was not analyzed in detail because WS does not have the legal authority to implement or regulate hunting. Furthermore, local laws/ordinances prevent hunting within the park as stipulated in the Regulations for

the Government of Parks under the control of the Commissioners of Fairmount Park, Philadelphia, 1984 (as amended July 6, 1992) , SECTION 108. HUNTING, TRAPPING AND FISHING “No person shall hunt, trap, chase or capture, in any manner, any wildlife of any kind”. And also the City of Philadelphia Ordinance 10-815 states “no person shall go upon land controlled by the City.....for the purpose of hunting wildlife.”

Finding of No Significant Impact

The analysis in the EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of this proposed action. I agree with this conclusion and therefore find that an EIS need not be prepared. This determination is based on the following factors:

1. Deer damage management as conducted by WS in the State of Pennsylvania, is not regional or national in scope.
2. Based on the analysis documented in the EA, the impacts of the proposed action will not significantly affect public health or safety. The proposed action is expected to result in an indirect beneficial impact on public health and safety by reducing the potential risk of disease transmission and deer-vehicle collisions. Risks to the public from WS methods were determined to be low in a formal risk assessment (USDA 1994, Appendix P).
3. The proposed action will not have a significant impact on unique characteristics such as park lands, wetlands, wild and scenic areas, or ecologically critical areas. Built-in mitigation measures that are part of WS’s standard operating procedures and adherence to laws and regulations will further ensure that WS activities do not harm the environment.
4. The effects on the quality of the human environment are not highly controversial. Although certain individuals may be opposed to killing deer, this action is not controversial in relation to size, nature, or effects.
5. Mitigation measures adopted and/or described as part of the proposed action minimize risks to the public, prevent adverse effects on the human environment, and reduce uncertainty and risks. Effects of methods and activities, as proposed, are known and do not involve uncertain or unique risks.
6. The proposed action does not establish a precedent for future actions. This action would not set a precedent for future white-tailed deer damage management that may be implemented or planned within the State.

7. The number of deer that will be taken by WS annually is very small in comparison to total populations. Adverse effects on other wildlife species and on wildlife habitat would be minimal. The EA discussed cumulative effects of WS on target and nontarget species populations and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State.
8. This action will not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places and will not cause loss or destruction of significant scientific, cultural, or historic resources. Wildlife damage management would not disturb soils or any structures and therefore would not be considered a "Federal undertaking" as defined by the National Historic Preservation Act.
9. WS determined that the proposed project would not adversely affect Federally or Pennsylvania State listed threatened or endangered species.
10. The proposed action is consistent with local, state, and federal laws that provide for or restrict WS wildlife damage management. Therefore, WS concludes that this project is in compliance with Federal, State and local laws for environmental protection.

Decision and Rational

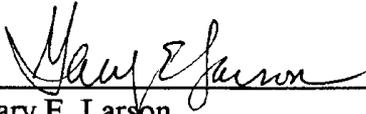
I have carefully reviewed the Environmental Assessment (EA) prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the EA are best addressed by selecting Alternative 2 (*Proposed Action/WS Shoots Deer to Supplement Commission's Program*) and applying the associated mitigation and monitoring measures discussed in Chapter 3 of the EA. Alternative 2 is selected because (1) it offers the greatest chance at maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and nontarget species populations; (2) it presents the greatest chance of maximizing net benefits to public health and safety; and, (3) it offers a balanced approach to the issues of humanness and aesthetics when all facets of these issues are considered. I have adopted the Pre-Decisional EA "*Shooting White-tailed Deer To Assist The City of Philadelphia, Fairmount Park Commission In Achieving Deer Population Reductions On Park Properties Located In The Pennsylvania Counties Of Delaware, Montgomery And Philadelphia*" with the Decision as the final. The one comment identified from public involvement was minor and did not change the analysis. Therefore, it is my decision to implement the proposed action as described in the EA.

Copies of the EA are available upon request from USDA, APHIS, WS, P.O. Box 459, Summerdale, PA 17093.

USDA APHIS WS

Decision/FONSI

Shooting white-tailed deer to assist the City of Philadelphia, Fairmount Park Commission in achieving deer population reductions...



Gary E. Larson
Director, Eastern Region, USDA-APHIS-WS

Date 1/18/01

Literature Cited

- Bryant, B.K. and W. Ishmael. 1991. Movement and mortality patterns of resident and translocated suburban white-tailed deer. Pages 53-58 in L.W. Adams and D.L. Leedy, eds. Wildlife conservation in metropolitan environments. Natl. Inst. Urban Wildl. Symp. Ser. 2, Columbia, MD.
- Cromwell, J.A., R.J. Warren, and D.W. Henderson. 1999. Live-capture and small-scale relocation of urban deer on Hilton Head Island, South Carolina. Wildl. Soc. Bull. 27(4):1025-1031.
- Ishmael, W.E., D.E. Katsma, T.A. Isaac, and B.K. Bryant. 1995. Live-capture and translocation of suburban white-tailed deer in River Hills, Wisconsin. Pages 87-96 in J.B. McAninch, editor. Urban deer: A manageable resource? Proceedings 1993 Symposium, North Central Section, The Wildlife Society, 12-14 December 1993, St. Louis, Missouri.
- Jones, J.M. and J.H. Witham. 1990. Post-translocation survival and movements of metropolitan white-tailed deer. Wildl. Soc. Bull. 18:434-441.
- Mayer, K.E., J.E. di Donato, and D.R. McCullough. 1993. California urban deer management: two case studies. Urban Deer Symposium. St. Louis, MO.
- Natural Resource Consultants, Inc. 1996. Development of deer management recommendations for the Wissahickon Valley, Philadelphia, PA. Fort Hill, PA. 200 pp.
- O'Bryan, M.K., and D.R. McCullough. 1985. Survival of black-tailed deer following relocation in California. J.Wildl. Manage. 49:115-119.
- U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Animal Damage Control Program. 1994. Final Environmental Impact Statement. USDA, APHIS, ADC Operational Support Staff, 4700 River Road, Unit 87, Riverdale, MD 20737.